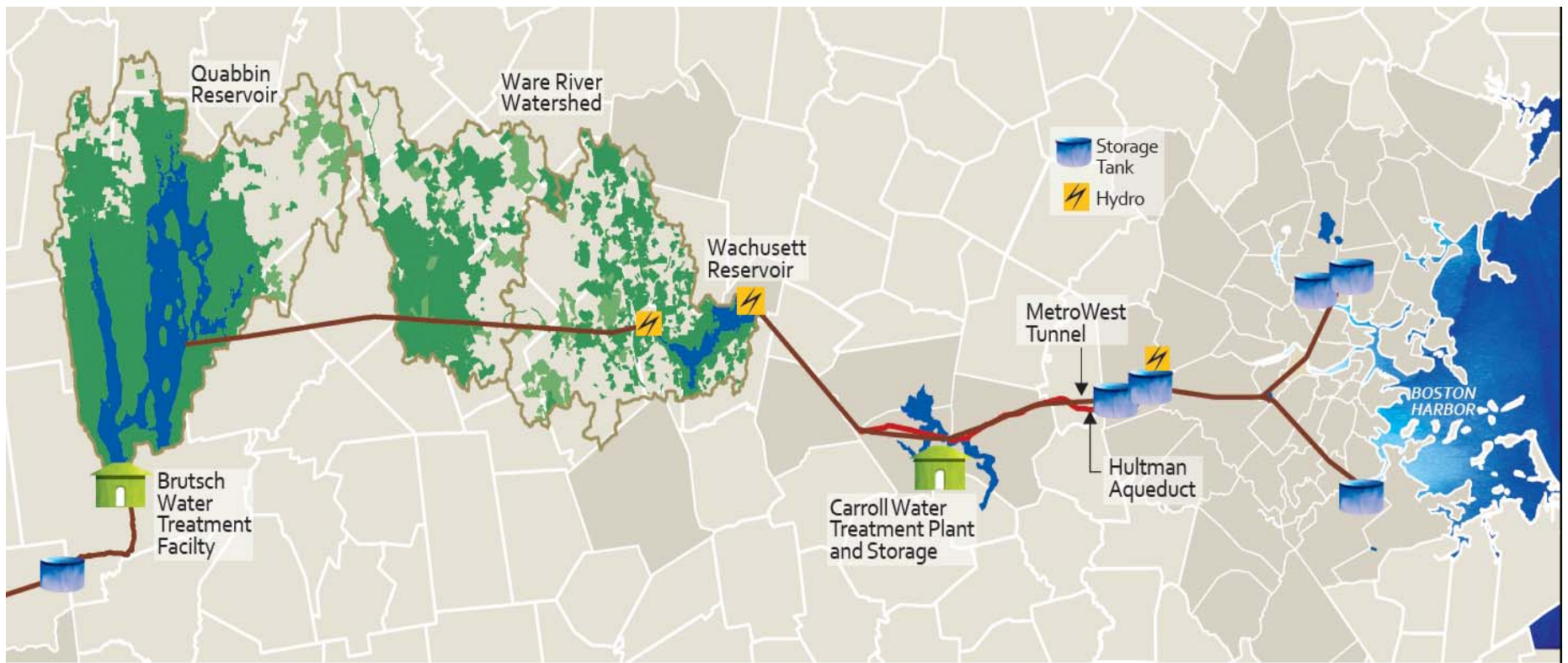


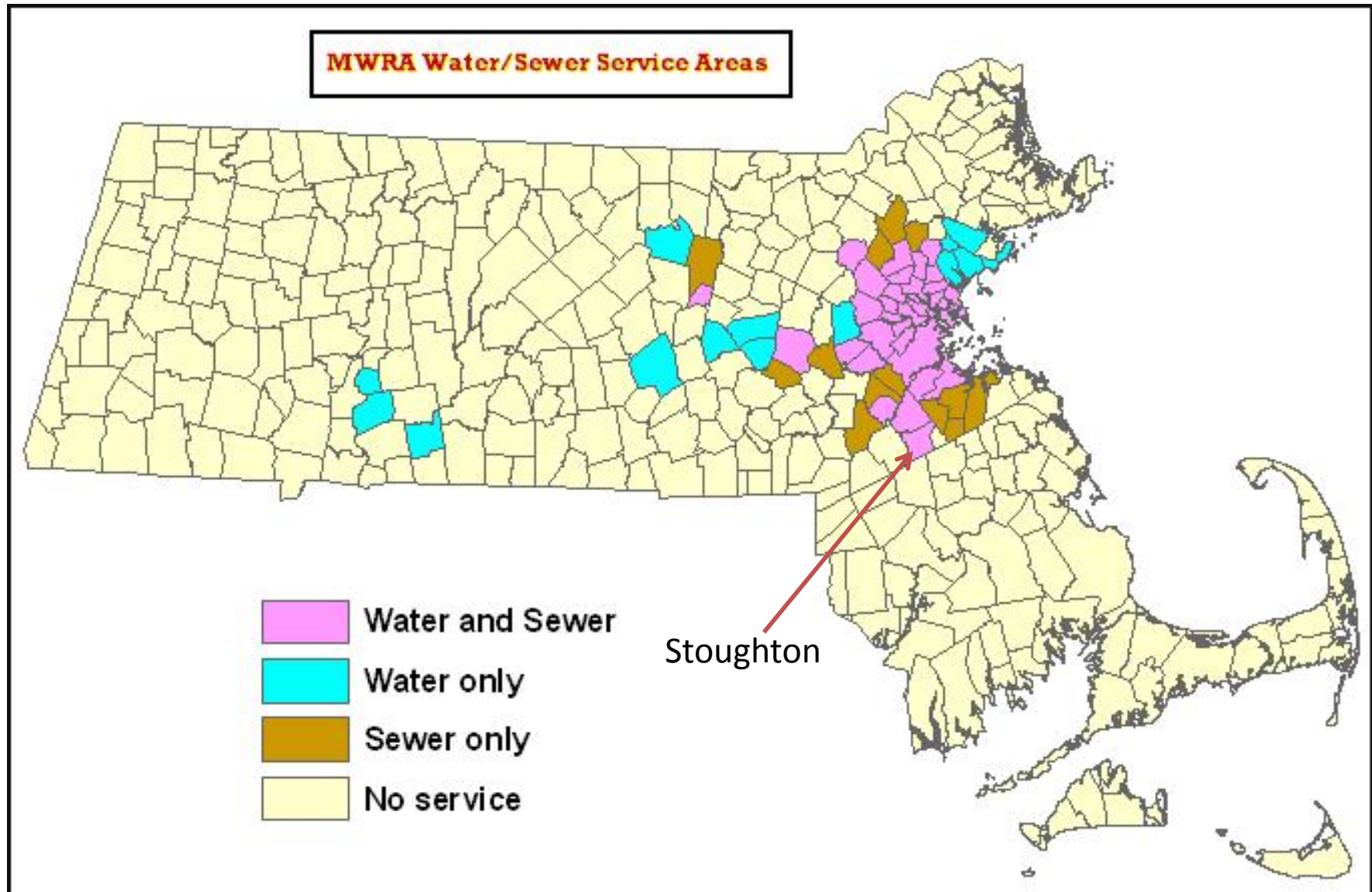
Where Does Stoughton's Water Supply Come From?

Phil McNulty; PE, Water & Sewer Superintendent

Greater Boston Surface Water Supply








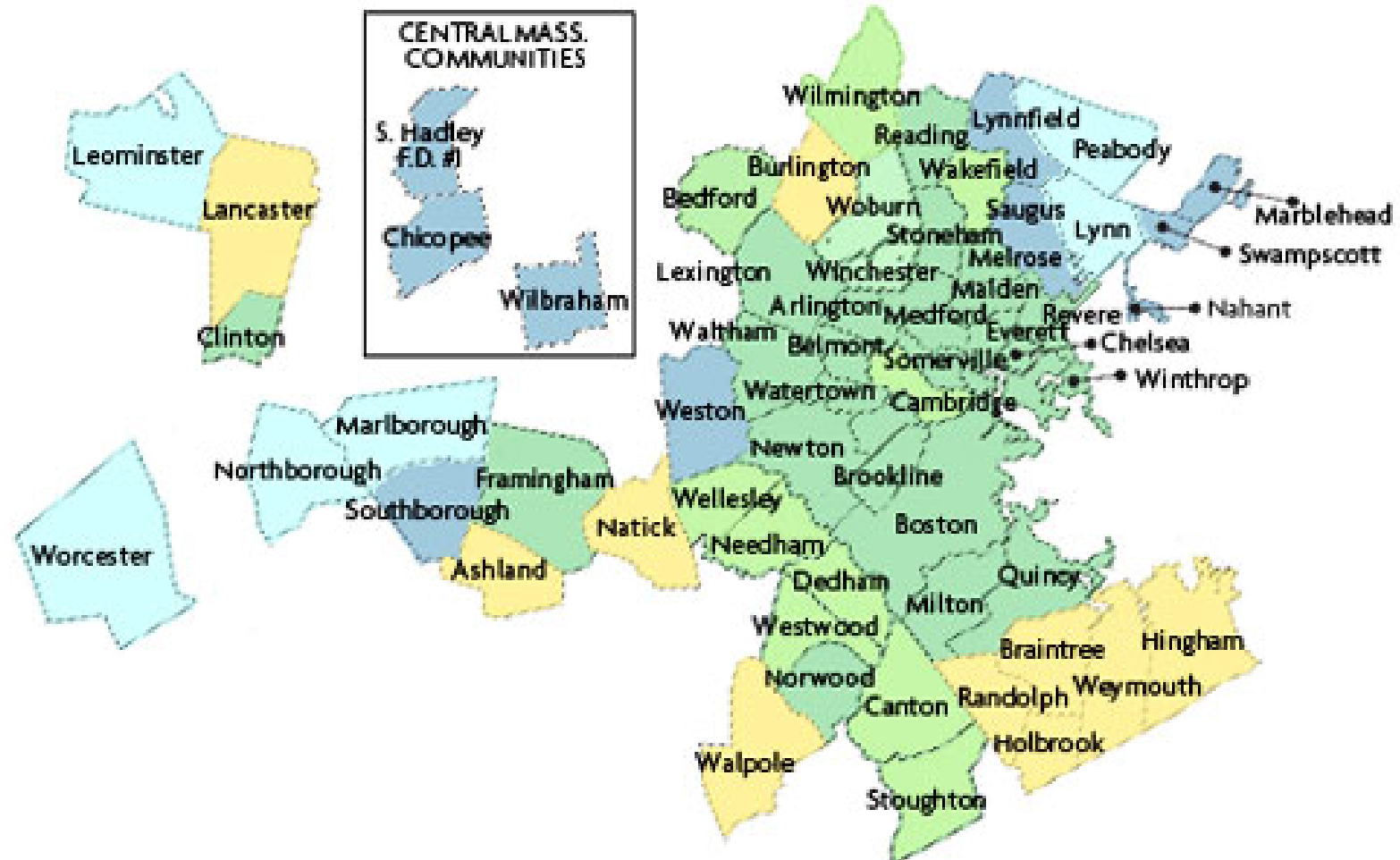
Greater Boston Surface Water Supply





MWRA SERVICE AREA

- | | |
|---|--|
|  Water only |  Partial/emergency water only |
|  Sewer only |  Full sewer, partial/emergency water only |
|  Water and sewer | |



Surface Water

- Surface water are the lakes, streams, rivers and ponds, which are also replenished by rain and snow.



Ames Pond

Private Water Well

Some people have private wells on their property

These wells are built similarly to the Town wells, but a smaller version



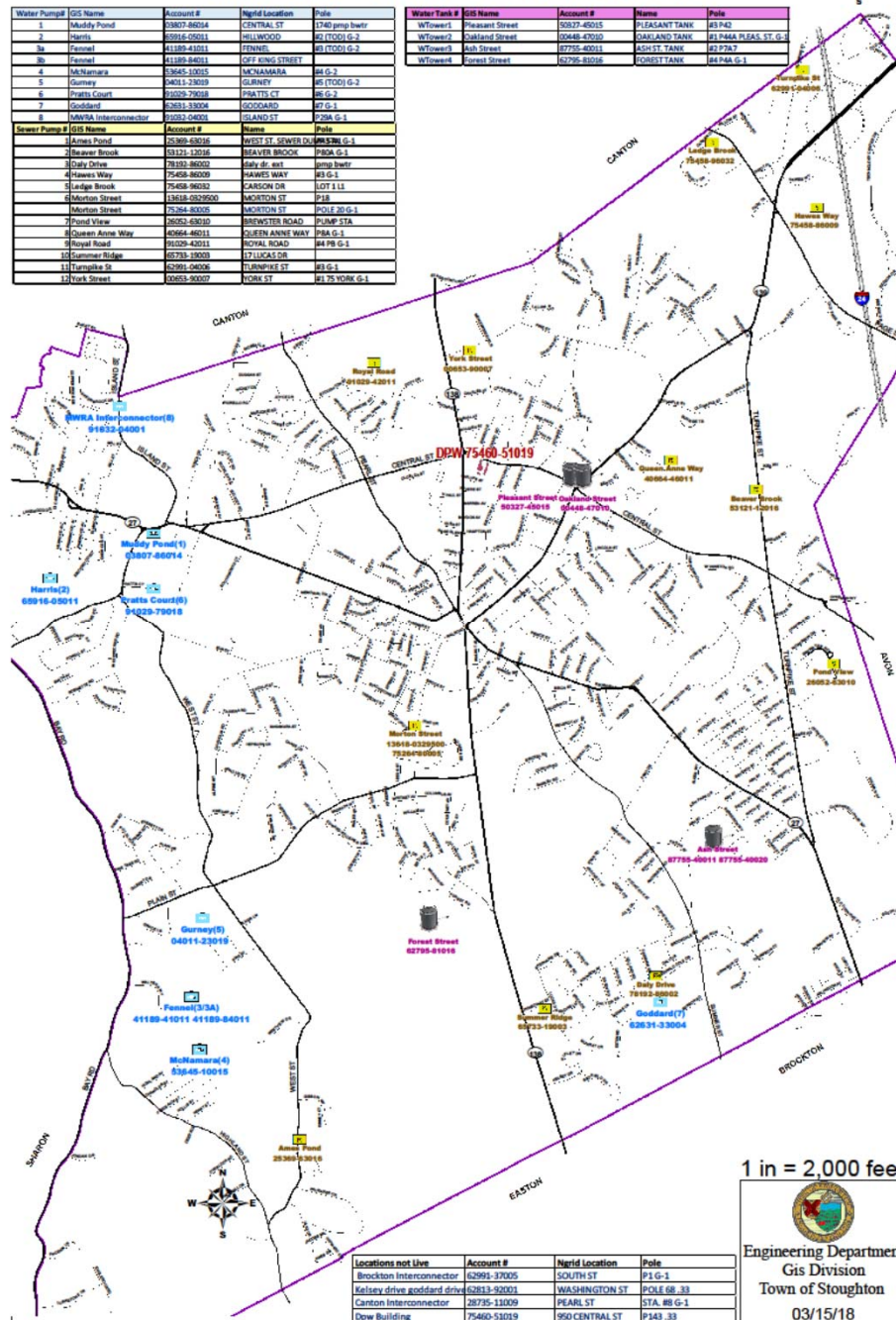
Stoughton's Water Supply

- Water from the groundwater is pumped from the Town Wells into the treatment plants.
- Stoughton has 8 wells in town that are used to supply water to the public
- We also have 4 water storage tanks
- And 2 of the wells have Water Treatment Filter Plants

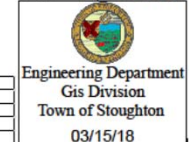
Water and Sewer Pump Stations National Grid Account Numbers

Water Pump#	GIS Name	Account #	Neighborhood	Pole
1	Muddy Pond	33807-86254	CENTRAL ST	1740 pump bwy
2	Harvey	60916-05011	CLAYTON	42 TCO G-2
3a	Forest	41189-41011	FOREST	40 TCO G-2
3b	Forest	41189-84011	OFF KING STREET	45 G-2
4	McNamara	53645-10015	MCNAMARA	45 G-2
5	Gurney	54511-13019	GURNEY	41 TCO G-2
6	Pratts Court	51025-79018	PRATTS CT	46 G-2
7	Goddard	53631-33004	GODDARD	47 G-1
Water Interconnector		41021-04011	CLAYTON ST	274 G-1
Sewer Pump#	GIS Name	Account #	Neighborhood	Pole
1	James Pond	75309-63036	WEST ST. SEWER DRAIN	45 G-1
2	Seaver Brook	53121-12036	SEAVER BROOK	46 G-1
3	Grady Drive	75153-89030	Grady Dr. ext	pump bwy
4	James Way	75458-86039	HAWES WAY	43 G-1
5	Lodge Brook	75458-86032	CARSON DR	LOT 1 LL
6	Morton Street	13618-02050	MORTON ST	P18
7	Morton Street	75354-80036	MORTON ST	POL 20 G-1
8	Pond View	26052-63030	BREWSTER ROAD	PUMP STA
9	Queen Anne Way	40664-46011	QUEEN ANNE WAY	P8A G-1
10	Royal Road	35029-42011	ROYAL ROAD	44 PB G-1
11	Summer Ridge	40733-13019	CLUCKAL DR	
12	Turnpike St	62991-04036	TURNPIKE ST	43 G-1
13	York Street	03653-80037	YORK ST	41 75 YORK G-1

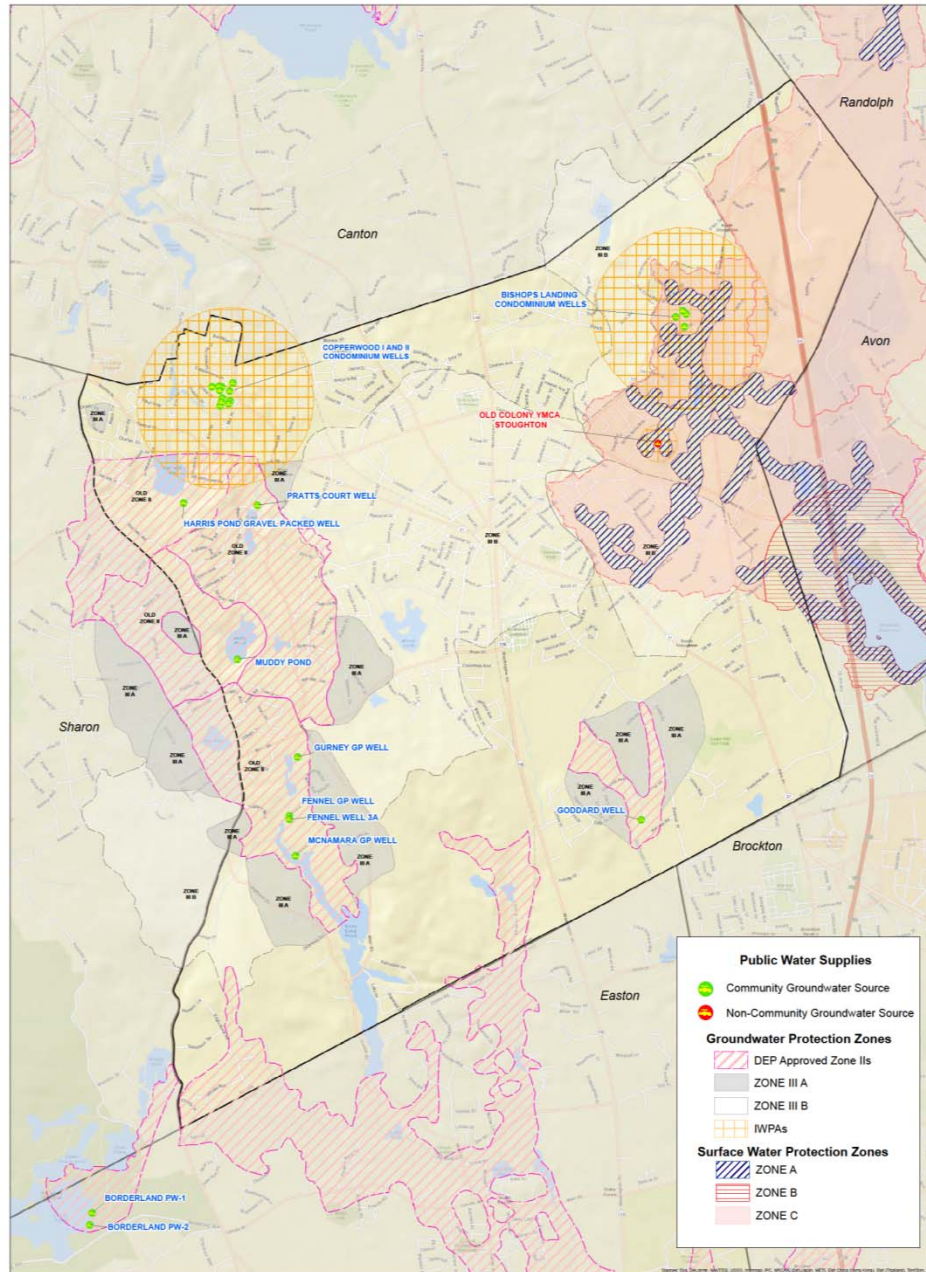
Water Tank #	GIS Name	Account #	Name	Pole
WTower1	Pleasant Street	53027-45015	PLEASANT TANK	43 P42
WTower2	Clayton Street	03448-47019	CLAYTON TANK	417444 PLEAS ST G-1
WTower3	Adh Street	87705-40011	ADH TANK	42 P797
WTower4	Forest Street	62795-80036	FOREST TANK	44 P44 G-1



1 in = 2,000 feet

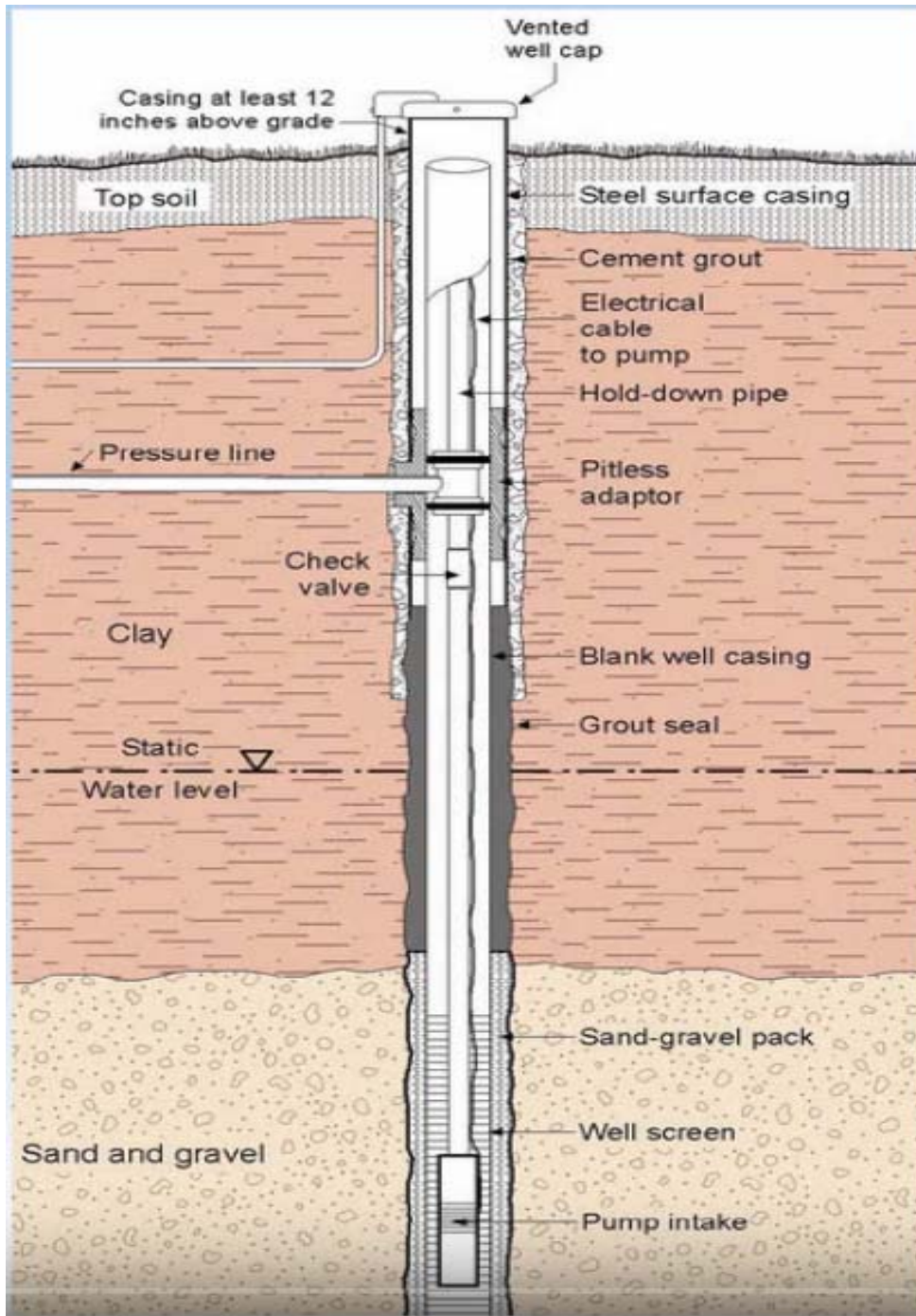


Locations not Live	Account #	Neighborhood	Pole
Brookline Interconnector	62991-37005	SOUTH ST	P1 G-1
Kelley drive goddard drive	62913-92001	WASHINGTON ST	POL 48 .33
Canton Interconnector	28795-11039	PEARL ST	51A 48 G-1
Qew Building	75460-51019	950 CENTRAL ST	P143 .33



Wells

- The wells average 50' in depth and are constructed of a steel casing. The bottom 10' is screened.
- Each well pumps thousands of gallons of water per day. In total Stoughton uses about 2 million gallons per day.
- The water is then filtered at a treatment plant and chemicals are added for disinfection (chlorine) and pH adjustment to prevent corrosion in the pipes.



Gravel Well # 3 50' Deep

- Top 40' have a 2' diameter steel casing
- The bottom 10' is screened from 40'-50'

Pratts Court Water Treatment Plant



Treatment Process

- The water comes into the treatment plant as “raw” water and is then filtered through sand to remove iron and manganese then treated with chlorine and potassium hydroxide for disinfection and to adjust the pH.
- Once the water is ready it is then pumped out to the public by underground pipes.
- Water not used directly by houses and businesses overflow to the 4 storage tanks.

Filtration System



Plain St Water Treatment Plant



Filtration System



Chemical Feeds

- Disinfection (chlorine)
- Adjust pH (Corrossion control)



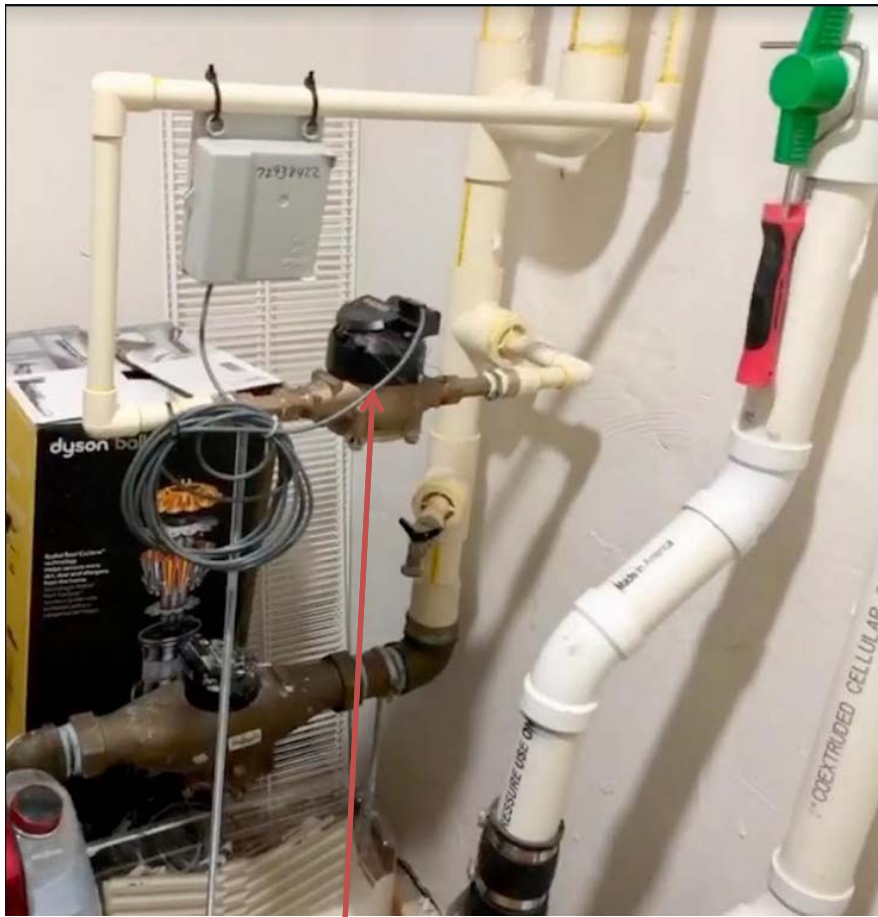


8" Water Main Pipe & Gate Valves

Water is pumped through pipes underground to everyone's house, restaurants, businesses, hydrants and everywhere else in town where water is used.

Water goes through a meter at each location to see how much is being used and billed.





Residential Water Meter

8" Water Main Pipe with 1" water service to a house where the water is metered for billing



Oakland St Tank



Tank Specification:

Height: 65'

Width: 52' Diameter

Storage Capacity:

1 million gallons

Pleasant St Tank



Tank Specification:
Height: 63.6'
Width: 76' Diameter

Storage Capacity:
2.0 Million Gallons

Ash St Tank



Tank Specification:

Height: 108'

Width: 47' Diameter

Storage Capacity:

1.4 million gallons

Forest St Tank



Tank Specification:

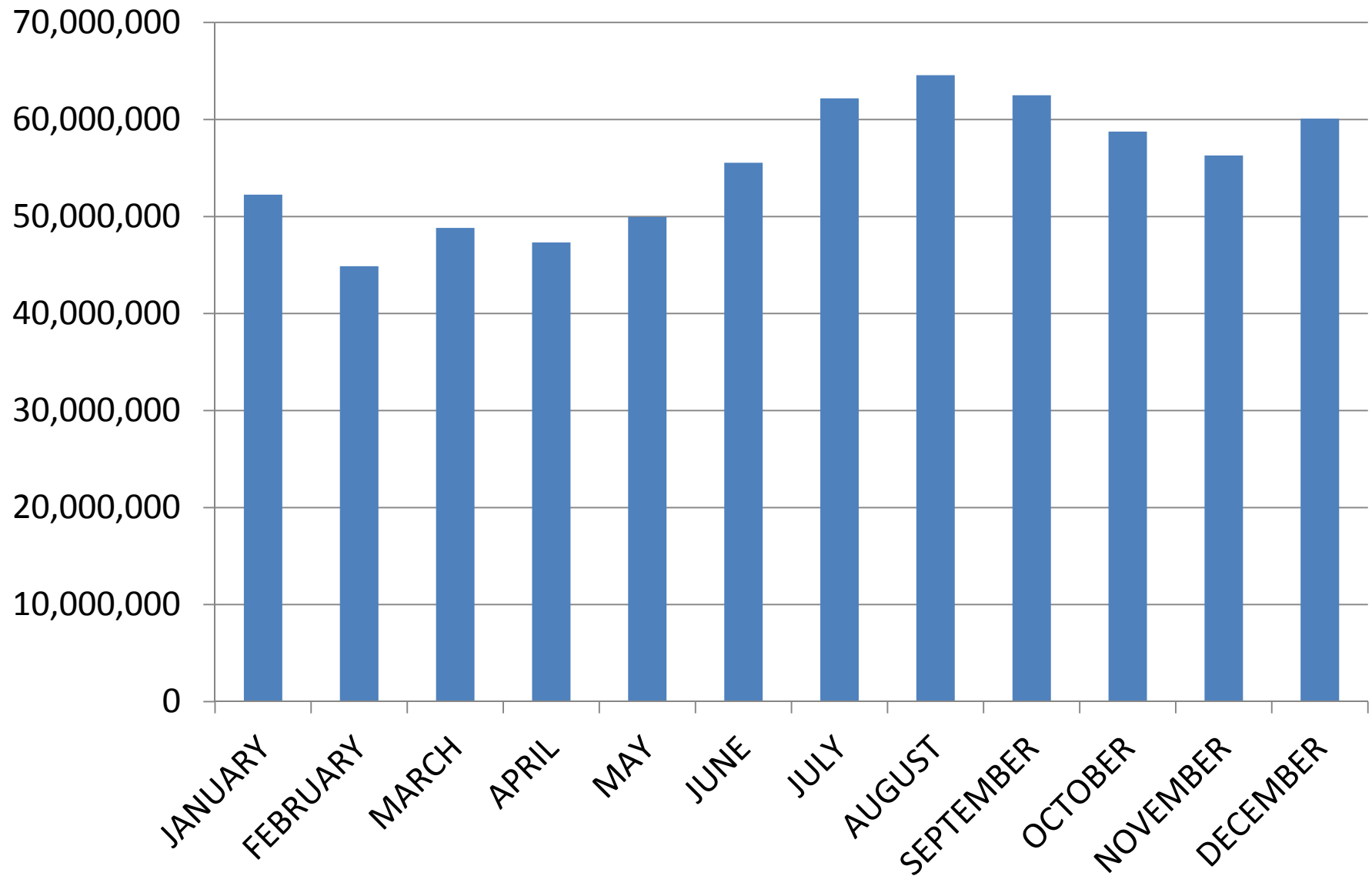
Height: 127'

Width: 117' Diameter

Storage Capacity:

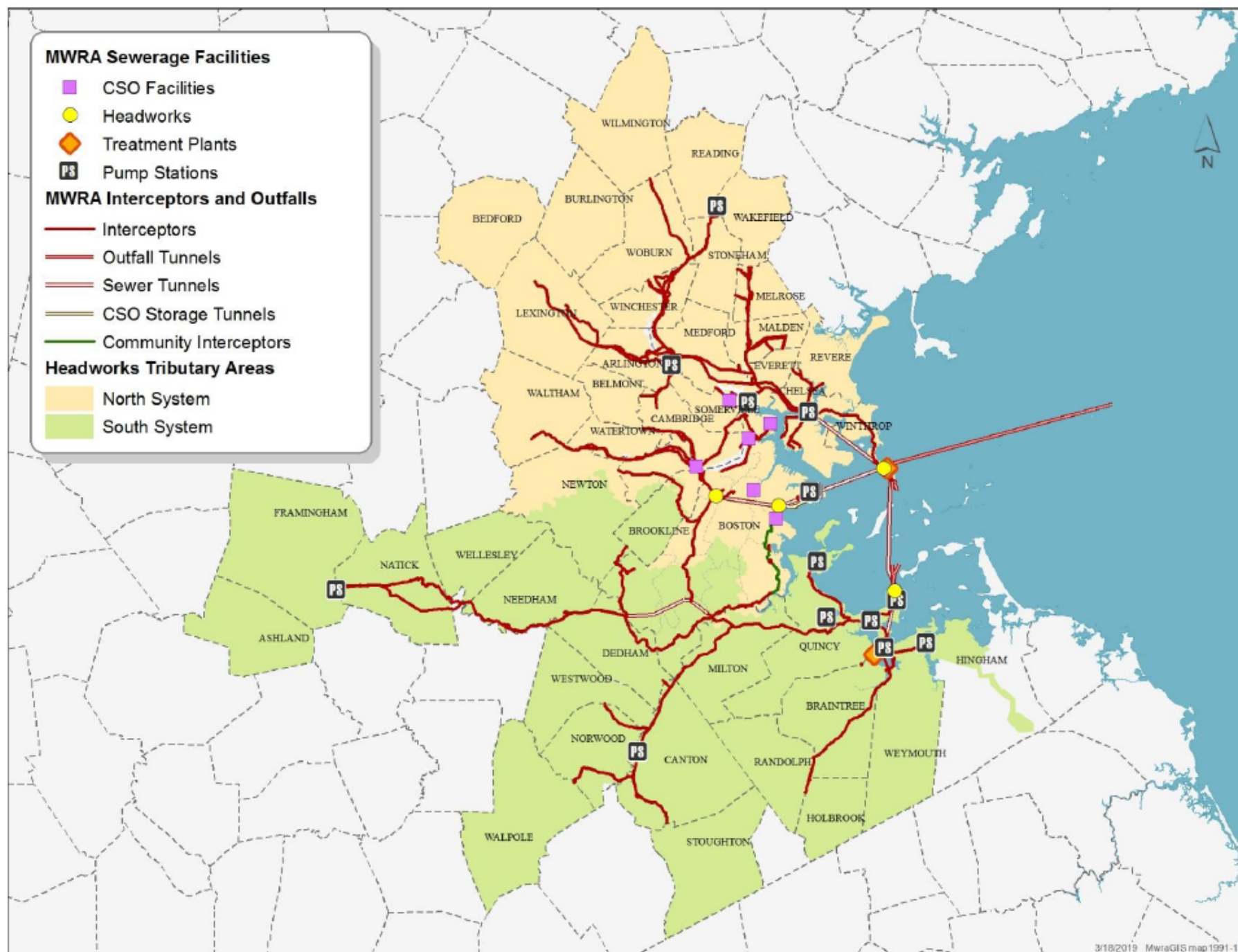
10.0 million gallons

Stoughton water supply pumped for 2019 GALLONS
Total Pumped for the Year – 663,170,000



Stoughton's Waste Water

- Where does the water go....while washing your hands, taking a shower, washing your clothes or flushing the toilet..
- The water goes down the drain .. Right ?
- But then where..?



On Site Water Well & Septic Systems

- Some residents have their own water supply and onsite septic systems.
- Instead of getting water from the Town's supply they drill their well on their property.
- Instead of being pumped out to Deer Island, it is pumped to a septic tank located in your yard.

TYPICAL DOMESTIC SEPTIC TANK SYSTEM

